

# WEBINAR WEDNESDAYS



**Wednesday, November 18, 2020**

## **AZ DPS DNA Updates**

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&

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Distributed by:

ARIZONA PROSECUTING ATTORNEYS' ADVISORY COUNCIL

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# Arizona Department of Public Safety Crime Laboratory Updates

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# AGENDA

- NEW LABORATORY POLICY ON PERMISSION TO CONSUME REQUESTS
- STRmix™ IMPLEMENTATION
- TRACK-KIT – SEXUAL ASSAULT TRACKING SOFTWARE

# PERMISSION TO CONSUME (PTC)

- HISTORY
  - Originally implemented when DNA testing was novel and less sensitive, and the science was more contentious.
  - Eliminated PTC requests for Property Crimes in ~2015.

## Slide 3

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**JK1**

Jennifer Kochanski, 11/2/2020

# PERMISSION TO CONSUME (PTC)


- NEW POLICY
  - If evidence is submitted to DPS for analysis, analysts are going to consume, as necessary.
    - The laboratory will continue to ask for PTC in homicide/attempted homicide cases in which a suspect is listed.
    - The laboratory should not be put in the position of accepting evidence that we must seek permission to test. By submitting evidence, consent to test in accordance with best practices is implied.
    - Analysts have the training to determine how much sample is appropriate based on case circumstances and sample type. YEARS of data and experience back up these decisions.

# PERMISSION TO CONSUME (PTC)

- NEW POLICY cont.
  - Consumption means consuming the evidence but does not always mean the extract will be consumed.
    - In many instances, extract will be still be available for retesting.
    - VERY rare to have testing challenged, usually it's the data.
  - Consuming a DNA sample at the beginning of the analysis is the best analytical option for developing a useful DNA profile.

# PERMISSION TO CONSUME (PTC)

DPS DNA Supplemental Form – Required to accompany all evidence submitted for DNA analysis.



Arizona Department of Public Safety Crime Laboratory  
**DNA Evidence Submission Supplement**

Reset

**DISCLAIMER:** By submitting the case evidence to the Arizona Department of Public Safety Crime Laboratory, you are authorizing the Laboratory to **consume samples** for DNA testing as necessary.

Lack of information or incomplete answers will result in the delay of analysis.

PHOENIX: [crcl\\_dna@azdps.gov](mailto:crcl_dna@azdps.gov) TUCSON: [src\\_l\\_dna@azdps.gov](mailto:src_l_dna@azdps.gov) FLAGSTAFF: [nrc\\_l\\_dna@azdps.gov](mailto:nrc_l_dna@azdps.gov)

**All questions must be answered in some manner.**

<b>Prosecutor &amp; Trial Date:</b>		Offense(s):	
Officer/Det:	Badge#	Agency:	
Direct Email:		Agency Case Number:	
Direct Phone:		DPS DR Number:	

1. Describe what happened in this case (or attach a **short** case summary):


2. How does each item submitted relate to the crime, **and** where was it found?

3. If blood was present at the scene, how many people were bleeding? How does each person relate to the crime?



← → ↻ azdps.gov/organization/TSD/scientific-analysis/dna#casework ☆ ⓘ

Apps SAB Intranet define commence ~...



# ARIZONA DEPARTMENT OF PUBLIC SAFETY

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## DNA SCIENTIFIC SERVICES

### DNA Casework

The Scientific Analysis Bureau provides serology and forensic DNA analysis using the most modern DNA scientific services for the examination of crime evidence to identify or exonerate individuals. Forensic DNA analysis involves testing of biological samples left at a scene to determine a DNA profile which can then be compared to the known profile of an individual or entered into the Combined DNA Index System (CODIS), a national database of DNA profiles, to search for a potential match. DNA analysis is offered at the Central, Southern and Northern laboratories.

To reduce backlogs and provide timely investigative information, a triaged approach for evidence submission has been implemented. This will allow DNA Casework to channel resources to focus on the most crucial evidence for every case and provide a quicker turnaround time for all customers.

**\*\*\*NEW\*\*\*** In order to expedite the testing of evidence for DNA, permission to consume is considered granted at the time of submission. While every effort will be made to preserve samples for future testing, consumption will occur at the discretion of the analyst. For cases involving death or attempted homicide, permission to consume will only be requested if a suspect is named. To download the new DNA supplement with this information, please click on the link for the DNA Supplemental Form below.

A decorative graphic in the bottom-left corner consisting of two parallel lines, one dark gray and one bright blue, extending diagonally from the bottom-left towards the center of the slide.

STRmix™

# STRmix™

- STRmix™ is expert forensic software developed by ESR and Forensic Science South Australia (FSSA) to efficiently and consistently resolve mixed DNA profiles.
- STRmix™ uses a fully continuous approach for DNA profile interpretation, resolving complex DNA mixtures. STRmix™ software combines biological modelling and mathematical processes to achieve results not possible with traditional DNA interpretation methods.
- A Likelihood Ratio (LR) provides statistical weight for comparisons to reference profile(s).

# STRmix™ - Example Report Wording

- Single source DNA profile: *It is at least \_\_\_\_ times more likely to obtain the observed STR DNA results if item \_\_\_\_ (individual's name) is the contributor than if a random, unrelated individual is the contributor.*
- Two person mixed DNA profile: *It is at least \_\_\_\_ times more likely to obtain the observed STR DNA results if item \_\_\_\_ (individual's name) and a random, unrelated individual are the contributors to the mixture than if two random, unrelated individuals are the contributors.*
- Only one LR will be reported. When multiple populations are selected to calculate an LR, STRmix™ will calculate LRs for each population individually and then provide a single LR that stratifies across all populations.



# TRACK-KIT

# Track-Kit

- ARS 13-1426 and 13-1427 establishes time limits for the submission of sexual assault kits (SAKS) to a forensic laboratory and requires all kits be tracked and the status be reported to the Governor's Office on an annual basis.
- DPS identified as agency responsible for complying with annual reporting requirements.
- The DPS Crime Laboratory implemented Track-Kit as a means of objectively and efficiently tracking and reporting SAK data.
- Track-Kit Process.
  - Track-Kit is updated at each step: Opened by Medical facility, collected by law enforcement, submitted to the laboratory, laboratory updates, etc.
  - Survivors can discreetly monitor the status of their kit (minimal details) and Track-Kit provides a list of Arizona resources which may be valuable to a victim of sexual assault or their family.



# Track-Kit

- Stakeholders in the investigations of sexual assaults can monitor the status of SAKs through one of several different portals:
  - Medical Facility
  - Law Enforcement
  - Laboratory
  - Survivor
  - Prosecutor

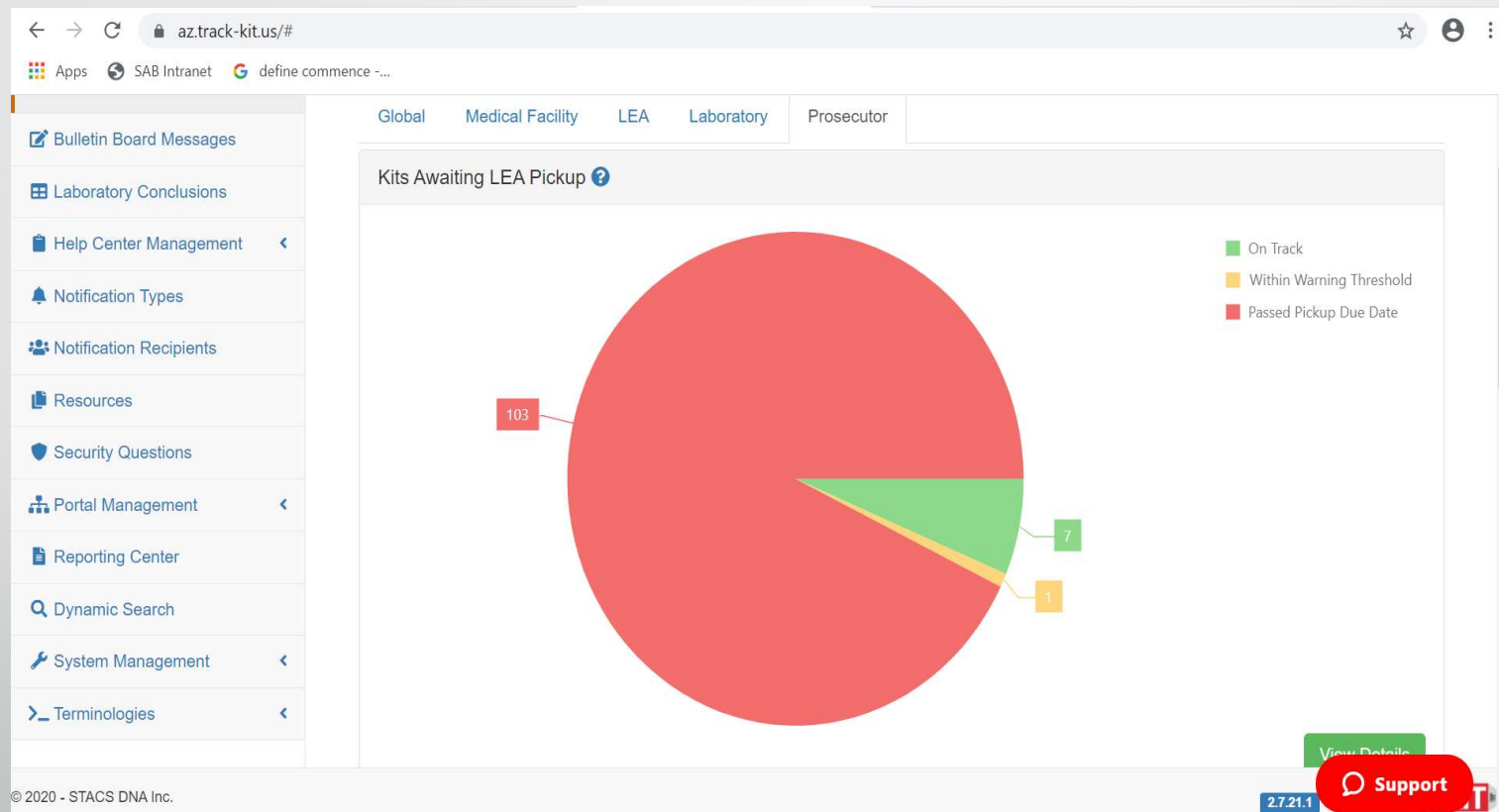


# Track-Kit

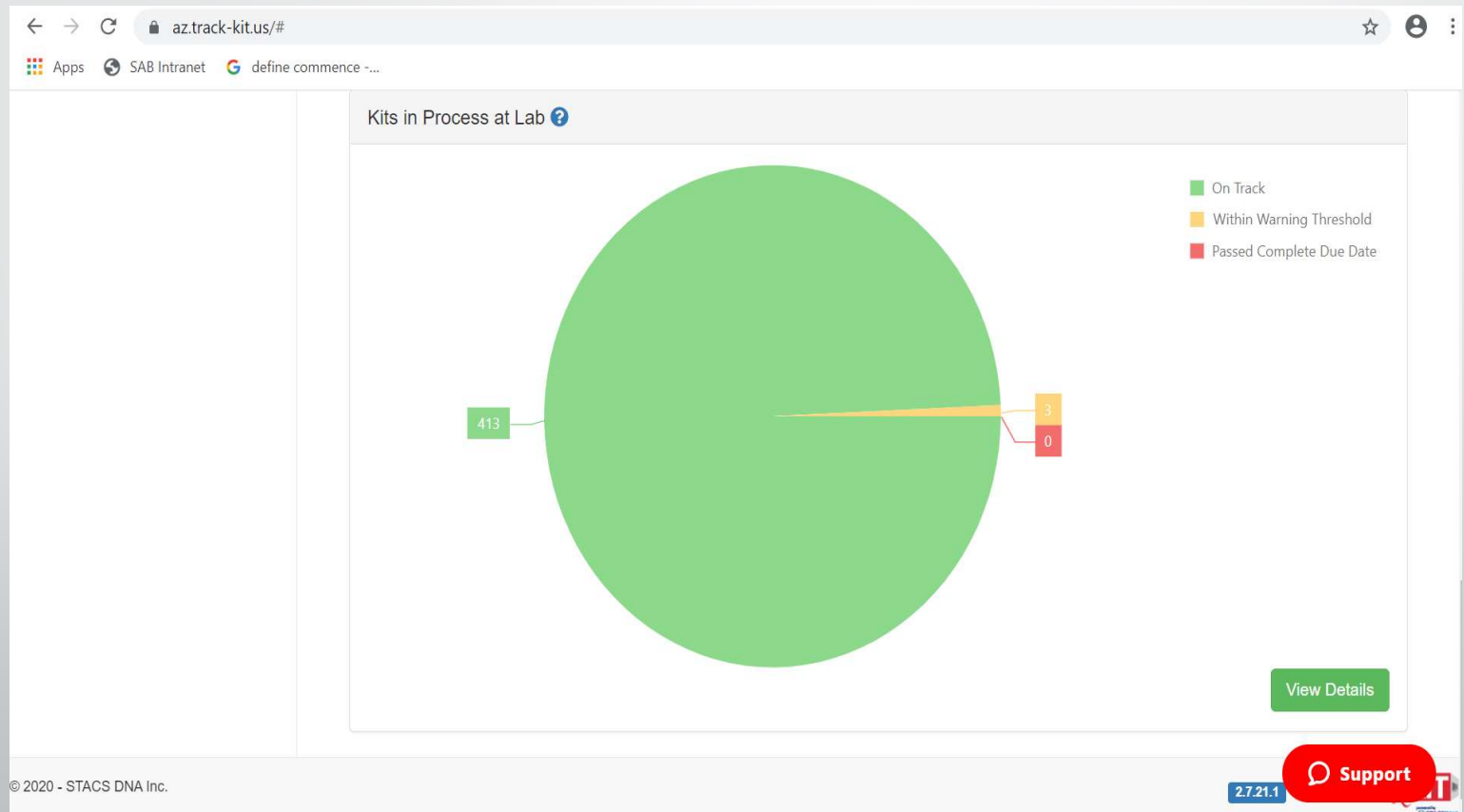
- The laboratory began the process of customizing the Prosecutor Portal in late 2019. With COVID-19, progress on this has been delayed until early in 2021.
- Features within the Prosecutor Portal will be customized based on input from State prosecutors.



# Track-Kit



# Track-Kit





QUESTIONS